

## 2.29 Maintenance During Construction

### 2.29.1 General

The Design-Builder shall perform all Work necessary to meet the maintenance requirements described in this Section. Elements of Work shall include operation, maintenance, and repair of the existing facilities; and facilities constructed under the PDB Contract beginning at the earlier of the following two milestones: 45 Calendar Days after the Notice to Proceed with Phase 2 Work for a Culvert Bundle or 7 Calendar Days prior to installation of any High Visibility Fence (HVF), High Visibility Silt Fence (HVSF), or other Best Management Practices (BMPs); and ending on the day of Culvert Bundle Physical Completion for each Culvert Bundle.

The Design-Builder shall perform maintenance during construction in a safe, reasonable, and prudent manner, and shall employ good business practices and appropriate management techniques. The Design-Builder shall furnish all labor, materials, equipment, and necessary services, such as highway safety controls, in connection with maintenance during construction. Refer to the WSDOT *Maintenance Manual* for maintenance standards of items listed as the Design-Builder's responsibility. When referencing the WSDOT *Maintenance Manual*, all references to "should" or "may" shall be interpreted as "shall" unless approved by the WSDOT Engineer.

For the purpose of maintenance during construction, the Project limits are defined as all Right-of-Way (ROW), including any easements which may be necessary to construct the Project, that is located within the following areas:

#### Project Maintenance Limits

The Project limits as defined in Appendix 1 (Project and Culvert Sites Descriptions) to the PDB Contract and each Culvert Bundle Amendment.

The Design-Builder shall provide maintenance, inspections, and repairs required on an "as needed" basis throughout the duration of the PDB Contract in accordance with the WSDOT *Maintenance Manual*. If WSDOT determines that the Design-Builder has failed to provide adequate routine maintenance, emergency, and operational response, or inspections and repairs, the WSDOT Engineer will issue a verbal notification of the failure to the Design-Builder.

The WSDOT Engineer will follow the verbal notification with a written notification to commence and continue the correction of the failure. Failure by the Design-Builder to correct the stated deficiency within 24 hours of the verbal notification may result in WSDOT performing the Work without prejudice to other remedies WSDOT may have. In such case, WSDOT will deduct the cost of correcting such deficiencies from payments then or thereafter due to the Design-Builder. If payments then or thereafter due are not sufficient to cover the cost of

correcting the deficiencies, the Design-Builder shall pay the difference to WSDOT upon demand.

### **2.29.2 Mandatory Standards**

The following is a list of Mandatory Standards that shall be followed for all design and construction related to this Section as referenced in TR Section 2.2, *Mandatory Standards*.

1. Special Provisions (Appendix 4)
2. Standard Specifications M 41-10 (Appendix 4)
3. WSDOT *Maintenance Manual* M 51-01 (Appendix 4)
4. WSDOT *Roadside Manual* M 25-30 (Appendix 4)
5. WSDOT *Right of Way Manual* M 26-01 (Appendix 4)
6. WSDOT *Roadside Policy Manual* M 3110 (Appendix 4)

### **2.29.3 Maintenance of the Right of Way**

#### **2.29.3.1 General**

Outside the Sensitive Area boundaries enclosed by HVF or HVSF, the Design-Builder shall maintain the roadside vegetation disturbed by the Design-Builder's operations. The Work includes nuisance vegetation control, noxious weed control, tree and brush control, and turf and grass care.

#### **2.29.3.2 Nuisance Vegetation Control**

The Design-Builder shall control knotweed, scotch broom, and blackberry within the Project limits. The Design-Builder shall treat all nuisance vegetation to ensure it is dead prior to removal. Scotch broom shall be removed prior to blooming. Once knotweed has been treated, dead knotweed stems shall be removed from the Project limits. The Design-Builder shall control all alder, cottonwood, and willow within new stormwater facilities during the plant establishment period. The Design-Builder shall maintain all stormwater treatment facility access routes in a vegetation-free state. The nuisance vegetation control shall occur for the life of the PDB Contract, including the plant establishment period.

#### **2.29.3.3 Noxious Weed Control**

The Design-Builder shall control all Class A & B noxious weeds within the Project limits including designated Sensitive Areas as required by law. Notification by WSDOT or the county weed control board will be considered notification. Weed control shall be accomplished by the Design-Builder.

Notices to comply typically allow up to 10 Calendar Days to complete the activity. The performance measure for control is 100 percent. Herbicides used

within the Project limits shall be applied at recommended label rates to the target vegetation, and only during weather conditions that will allow use of the control agent. The Design-Builder shall use an herbicide at legal rates and as recommended by the herbicide manufacturer for the target vegetation and shall ensure that a person who is licensed to apply herbicide performs the Work. A copy of the application record shall be submitted to the WSDOT Engineer.

The Design-Builder shall provide WSDOT with access to the area the herbicide will be applied and shall ensure that all materials, equipment, and personnel are outside of the area when the herbicide is applied.

If the Design-Builder decides to remove noxious weeds by hand, the Design-Builder shall remove the root of the plant and dispose of it in a container. The Design-Builder shall dispose of the plant and the container in a refuse disposal and shall complete the activity within the time limit specified on the notice to comply. If the Design-Builder fails to respond to a notice to comply, the Design-Builder shall pay all fines assessed, including the Subcontractor, administrative overhead, personnel, material, equipment, and excess penalties. WSDOT reserves the right to control weeds in an area identified as out of compliance by any means they choose, and at any time of day, they deem appropriate.

#### **2.29.3.4 Tree and Brush Control**

The Design-Builder shall remove or trim all trees or brush that obscure roadway signs or cause a reduction in sight distance. The Design-Builder shall remove trees that are identified as hazards or dangers within the Project limits, roadway, or structures adjacent to or within the ROW. The WSDOT Engineer will identify and notify the Design-Builder of trees and brush that fall within this criterion. The Design-Builder shall remove danger/hazard trees within 24 hours of verbal or written notification from the WSDOT Engineer. The Design-Builder shall remove downed trees that have fallen and are within 30 feet of the edge of the paved shoulder of an active travel lane, or that may be a safety concern for public travel or create a restriction or obstruction to drainage conveyances or other water quality features.

#### **2.29.3.5 Turf and Grass Care**

The Design-Builder shall mow existing turf or grasses from the edge of the pavement to a point 16 feet from the edge. When the average grass height reaches 30 inches, the grass or turf shall be mowed to a height between 6 and 12 inches. The Design-Builder shall not scalp the ground within Sensitive Areas. Mowing will not be required on slopes steeper than 2H:1V (Horizontal: Vertical).

#### **2.29.3.6 Health Hazards**

The Project area is occupied by transients, birds, bats, and rodents; and will contain biological and associated physical hazards. The areas under the ends of

1 the bridges within the Project are most impacted by these hazards. Other areas  
2 may also be impacted.

### 3 **2.29.3.6.1 Transients**

4 The Project limits include materials and waste that pose a physical, biological  
5 safety, and health hazards, such as waste associated with transients and drug  
6 users. Materials and waste may include, but are not limited to, hypodermic  
7 needles, food, garbage, clothing, bedding, broken glass, human and animal  
8 excrement, drug paraphernalia, makeshift dwellings, and other hazards. The  
9 Project area may also be occupied by violent and dangerous individuals.

10 In the event transients are encountered within the Project limits and are hampering  
11 Work or causing unsafe Work conditions, the Design-Builder shall notify the  
12 responsible enforcement agency (Washington State Patrol (WSP), local law  
13 enforcement agency, community service patrol), who will assist the Design-  
14 Builder with removing the transients. The Design-Builder shall schedule a place,  
15 date, and time to meet the enforcement agencies so that the enforcement agencies  
16 can escort the transients from the Project limits.

17 The Design-Builder shall ensure that the public, including persons who may be  
18 non-English speaking or those who may not be able to recognize potential safety  
19 and health hazards within the Project area, are not harmed by the Design-Builder's  
20 activities.

21 The Design-Builder shall follow the instructions in the *Illegal Encampments*  
22 *within State Right-of-Way* (Appendix 4). All costs to remove the transients and  
23 clean up the Site within the Project limits shall be included in the Culvert Bundle  
24 Contract Price and the Base Culvert Bundle Guaranteed Maximum Price.

### 25 **2.29.3.6.2 Health and Safety Requirements**

26 The Design-Builder shall coordinate with the WSDOT Engineer to provide and  
27 maintain a safe and healthy Project area for the WSDOT Engineer, and the  
28 Design-Builder's personnel as described in this Section and in accordance with  
29 Applicable Laws and these Technical Requirements.

### 30 **2.29.3.6.3 Construction Requirements**

31 The Design-Builder shall be responsible for the sanitation measures required to  
32 provide and maintain a safe and healthy Project Work area for the duration of the  
33 Project, in accordance with Applicable Laws and the PDB Contract. The Design-  
34 Builder shall develop and maintain a plan for the mitigation of health hazards  
35 ("Health Hazards Plan") at the Culvert Sites. The plan shall be available at the  
36 WSDOT Engineer's request.

**2.29.3.6.4 Site Maintenance for Biological and Physical Hazards**

Prior to commencement of the construction Work, the Design-Builder shall perform an initial cleanup of the Project Work area, including all preparatory Work required to make the Project area sanitary and safe in accordance with Applicable Laws and the Health Hazards Plan and to address all biological and physical hazards present. Necessary training of personnel, on-site and off-site preparations and safety equipment shall be provided by the Design-Builder to complete the initial cleanup and disposal of the biological and physical hazards.

**2.29.3.6.5 Public Notification**

The Design-Builder shall furnish and install informational signs approved by the WSDOT Engineer 3 Calendar Days prior to performing hazardous activities within the Project area known to be occupied by transients. Hazardous activities include, but are not limited to, cleaning, clearing brush, overhead activities, excavating, or operating other heavy equipment. The Design-Builder shall conduct a visual reconnaissance of the area at least 3 Calendar Days in advance to determine the type of cleanup and removal effort needed. The signs shall include dates and locations of the activity and state that trespassing is not authorized. The signs shall be visible from each apparent access route into the Work area. Each sign shall be weather resistant and post mounted; be written in both English and Spanish; state "No Trespassing"; and include the dates and location of the Work. Signs shall be maintained in legible condition until the hazardous Work at the Work area is physically completed, at which time the signs shall be removed from the Project.

The Design-Builder shall provide notification to homeless service organizations, homeless advocacy groups, shelters, and free health clinics. WSDOT will provide contact information and flyer templates for the Design-Builder's use. The Design-Builder's flyer shall contain the information included in the flyer templates. The Design-Builder shall submit the flyer and general plans to the WSDOT Engineer for Review and Comment at least 14 Calendar Days prior to commencing the hazardous activities.

The Design-Builder shall distribute the approved flyers by mail or hand delivery 7 Calendar Days prior to commencing activities within areas known to be occupied by transients.

**2.29.3.6.6 Periodic Site Maintenance**

If the Project Work area becomes unsanitary or unsafe due to biological and physical hazards after the Design-Builder prepares the Culvert Site for the first phase of construction activities, the Design-Builder shall perform additional Culvert Site maintenance and take additional measures as needed to protect the public, and WSDOT's and the Design-Builder's personnel. The nature and

1 frequency of the Culvert Site maintenance activities shall be included in the  
2 Health Hazards Plan. Periodic maintenance of the Project area may include the  
3 use of signs, fencing, lighting, law enforcement, or security.

#### 4 **2.29.3.6.7 Irrigation and Fire Systems**

5 Irrigation and fire systems, including any and all supply valve communication  
6 systems, are the responsibility of the Design-Builder to maintain in working  
7 condition. Fire systems must be kept working or a transition plan must be  
8 approved by the WSDOT Engineer.

### 9 **2.29.4 Maintenance of Roadways**

#### 10 **2.29.4.1 General**

11 The Design-Builder shall complete all components of the Work to allow for  
12 unrestricted traffic access to lanes and shoulders in accordance with TR Section  
13 2.22, *Maintenance of Traffic*.

#### 14 **2.29.4.2 Roadway Sweeping**

15 The Design-Builder shall maintain all paved areas within the Project limits to  
16 prevent the accumulation of dirt and gravel. The Design-Builder shall periodically  
17 and when designated by the WSDOT Engineer, perform street sweeping or other  
18 BMPs to remove debris from the roadway and shoulders. Design-Builder shall on  
19 a routine basis remove debris from the paved shoulder and shall not allow debris  
20 larger than 1-square foot to accumulate.

21 The Design-Builder shall take care to prevent spillage on haul routes. If spillage  
22 occurs, the Design-Builder shall remove it and clean the area within 1 hour of the  
23 spillage being observed or verbal notification from the WSDOT Engineer.  
24 Tracking of dirt and gravel from the Work zone is prohibited.

#### 25 **2.29.4.3 Existing Pavement**

26 The Design-Builder shall have a crew identified to respond to Project issues  
27 including potholes 24 hours a day, 7 days per week. The Design-Builder shall  
28 maintain all existing pavement including roadway and bridge pothole repair. Any  
29 pothole greater than 36 cubic inches in volume or 2 inches in depth shall be  
30 repaired within 24 hours of being observed by the Design-Builder or notified by  
31 the WSDOT Engineer. If the pothole is causing traffic to slow or deviate from  
32 normal traffic patterns, the Design-Builder shall perform pothole repair within 1  
33 hour of being observed by the Design-Builder or notified by the WSDOT  
34 Engineer. Temporary pothole repairs will be allowed if weather conditions will  
35 not allow for permanent repairs, or if traffic conditions dictate that permanent  
36 repairs are scheduled for another time to reduce impacts. Materials used for  
37 temporary pothole repairs shall be approved by the WSDOT Engineer. All

temporary pavement repairs shall be inspected by the Design-Builder at least once every business day or more often if the temporary repair shows any signs of failure. If the temporary repair shows signs of imminent failure, the repair shall be reinforced within 1 hour of being observed by the Design-Builder or notified by the WSDOT Engineer.

Permanent pothole repair shall be performed in accordance with TR Section 2.7, *Pavement*. Materials used for permanent pothole repair shall be of the same type and depth as the adjacent pavement. For pavement maintenance activities that require closures, the Design-Builder shall submit a Traffic Control Plan meeting the requirements of TR Section 2.22, *Maintenance of Traffic*.

#### **2.29.4.4 Pavement Markings**

The Design-Builder shall maintain existing and new pavement with painted, plastic, or raised pavement markings. The WSDOT Engineer will notify the Design-Builder when existing markings require refreshing. Paint for temporary pavement markings shall be in accordance with Section 9-34 of the Standard Specifications. The Design-Builder shall anticipate that, at a minimum, existing markings will need to be refreshed once per calendar year. Refer to Chapter 8 of the WSDOT *Maintenance Manual* for additional pavement marking requirements.

#### **2.29.4.5 Guardrail, Concrete Barrier, and Attenuators**

The Design-Builder shall replace or repair all guardrails, concrete barriers, and attenuators that become damaged by the public or by the Design-Builder's operations. Attenuators that are damaged and must be replaced shall meet current National Cooperative Highway Research Program and WSDOT standards. All parts used to repair a damaged attenuator shall be direct replacement parts as required by the manufacturer.

#### **2.29.4.6 Traffic System Signs**

The Design-Builder shall be responsible for the maintenance of existing permanent signs. Maintenance of existing permanent signs includes cleaning, repairing, and replacing damaged signs and posts. Cleaning will only be required when designated by the WSDOT Engineer.

#### **2.29.4.7 Stormwater Management**

The Design-Builder shall maintain and provide adequate stormwater management on the Project until Culvert Bundle Physical Completion for each Culvert Bundle. Maintenance shall include cleaning and repair to maintain the functionality of riprap, cribbing, ditches, channels, culverts, cross-drains, drainage structures, and gutters.

1 Catch basins and BMPs shall be inspected and cleaned once per year in  
2 accordance with the WSDOT *Highway Runoff Manual* (Appendix 4).

### 3 **2.29.4.8 Access to Public Facilities**

4 The Design-Builder shall maintain uninterrupted access to all public facilities  
5 affected by the Project. Access shall mean providing a clear and easily understood  
6 route into and out of existing public and private facilities and businesses. The  
7 Design-Builder shall provide all necessary signing to convey that the route to the  
8 facilities and businesses is open to traffic. The WSDOT Engineer will determine  
9 whether the signing is adequate. The Design-Builder shall provide access to all  
10 types of vehicles, including delivery trucks.

### 11 **2.29.4.9 Protection of Drainage Structures and Junction Boxes**

12 The Design-Builder shall verify that all existing and new drainage structures,  
13 Utility boxes, and junction boxes that are located within 2 feet of temporary or  
14 permanent travel lanes have sufficient strength to safely carry highway traffic  
15 loads without failing. Structures or boxes that do not have sufficient strength shall  
16 be reinforced, protected, or both prior to opening the travel lanes to traffic.

### 17 **2.29.4.10 Animal Carcasses**

18 Animal carcasses that present a traffic hazard, such as damaging vehicles,  
19 blocking a lane, or causing traffic to slow below the posted speed limit, shall be  
20 removed from the travel lanes by the Design-Builder within 1 hour of observation  
21 by the Design-Builder or notification from the WSDOT Engineer. The carcass  
22 shall be removed from the Project limits and disposed of by proper means at an  
23 approved location. Failure to remove the carcass within 1 hour will result in  
24 WSDOT correcting such deficiencies. In such case, WSDOT will deduct from  
25 payments then or thereafter due, the cost of correcting such deficiencies. If  
26 payments then or thereafter due are not sufficient to cover the cost of correcting  
27 the deficiencies, the Design-Builder shall pay the difference to WSDOT  
28 upon demand.

## 29 **2.29.5 Snow and Ice Operations**

### 30 **2.29.5.1 Public Travel Way**

31 WSDOT or the Local Agency will perform snowplowing and application of  
32 deicing agents or abrasives for public travel lanes. The snowplowing will be done  
33 as part of the normal course of plowing the public roadways within and in the  
34 vicinity of the Project. Snow or ice will not be removed from the public travel  
35 lanes to facilitate the Work or construction.

36 When plowing within the Project limits, WSDOT or the Local Agency will take  
37 no special measures to protect materials, traffic control devices, or equipment the



1 Design-Builder has stored or stockpiled on shoulders or within the Project limits.  
2 The Design-Builder shall maintain any channelization devices that may be  
3 displaced or damaged by snowplowing operations and application of deicer or  
4 abrasives.

5 Snow, ice, abrasives, or other debris (such as car parts and tire chains) that are  
6 plowed or migrate from the public traffic lanes or shoulders into the Work area  
7 will not be removed by WSDOT or the Local Agency. Any removal of this  
8 material within the Project limits shall be the Design-Builder's responsibility.

#### 9 **2.29.5.2 Work Zone**

10 The Design-Builder shall perform any snow and ice removal for the Design-  
11 Builder's operations within the Work area. The Design-Builder shall not allow  
12 any snow and ice removal from its operations to be placed within the public  
13 traffic lanes.

#### 14 **2.29.6 Electrical**

##### 15 **2.29.6.1 Luminaires**

16 The Design-Builder shall maintain and operate lighting systems within the  
17 Culvert Site in accordance with the requirements of Section 2.16, Illumination.  
18 Maintenance and operation include, at a minimum, the following:

- 19 • Replacement of lamps, as required
- 20 • Replacement or repair of any damaged equipment or underground cables
- 21 • Maintenance concerning a public safety issue (including exposed wires  
22 and knockdowns), within 1 hour of notification from the WSDOT Engineer
- 23 • Routine maintenance and other maintenance that does not affect public safety,  
24 within 24 hours of notification from the WSDOT Engineer

#### 25 **2.29.7 Hazardous Spills Response**

##### 26 **2.29.7.1 Public Travel Way**

27 Cleanup of hazardous spills by third parties within the public traffic lanes and  
28 shoulders will be coordinated by the WSDOT Engineer, the Washington State  
29 Department of Ecology (Ecology), and Local Agencies. The Design-Builder shall  
30 allow access to the Project area for spill response. The Design-Builder shall make  
31 personnel and equipment available to respond to all emergencies, except when  
32 such emergencies are life-threatening to the personnel.

33 In the event the hazardous spill is caused by the Design-Builder's equipment,  
34 operations, or Work, the Design-Builder shall be responsible for cleanup under  
35 the direction of the WSDOT Engineer and Ecology. All costs for cleanup

1 including all costs incurred by the Design-Builder, the WSDOT Engineer, the  
2 Ecology, other resource agencies, and contractors required to mitigate the hazard  
3 shall be borne by the Design-Builder.

#### 4 **2.29.7.2 Work Zone**

5 Any hazardous spills within the Work area and outside of the public travel lanes  
6 shall be the responsibility of the Design-Builder. The Work shall be performed in  
7 accordance with the Spill Prevention, Control, and Countermeasures Plan  
8 described in Section 2.8, *Environmental*.

#### 9 **2.29.8 Structures**

##### 10 **2.29.8.1 Existing Bridges**

11 The Design-Builder shall maintain drainage structures on and off the bridges  
12 within the Project. Free draining of water through any drainage structure shall be  
13 maintained.

#### 14 **2.29.9 Emergency Response**

##### 15 **2.29.9.1 Cooperation**

16 The Design-Builder shall cooperate with law enforcement and other emergency  
17 response agencies in response to accidents, fires, spills, or other emergencies in  
18 any area affected by the Project, including the Project area and public traffic  
19 lanes. The Design-Builder shall cooperate in all WSDOT investigations of  
20 accidents and other incidents within the Project area.

##### 21 **2.29.9.2 Emergency Access**

22 The Design-Builder shall work with emergency service providers to address their  
23 concerns about emergency access to and through the Project. This may include  
24 installing gates to allow emergency personnel to access the Project area.

25 The Design-Builder shall allow WSDOT Maintenance and all affected Local  
26 Agencies access to the Culvert Sites to respond to urgent safety concerns.

##### 27 **2.29.9.3 Notification**

28 The Design-Builder shall notify the WSDOT Engineer, WSP, and all emergency  
29 service providers in the affected area in writing of any access closures at the  
30 construction site. Notification shall include the names and telephone numbers  
31 (business, residence, and cellular) of Project personnel to contact in case of  
32 emergencies. This contact list shall be updated as necessary.

**2.29.9.4 Use of Design-Builder Resources**

The Design-Builder shall make personnel and equipment available to respond to all emergencies, except when the emergency is life-threatening to the personnel.

**2.29.10 Maintenance of Property**

**2.29.10.1 General**

The Design-Builder shall always preserve public and private property in accordance with Section 6.20 (Property Damage) of the PDB Contract.

The Design-Builder shall witness or reference land monument and property marker locations by a Land Surveyor licensed in the State of Washington, before moving, disturbing, or damaging any property.

**2.29.10.2 Restoration of Property and Landscape**

The Design-Builder shall, subject to Section 6.20 (Property Damage) of the PDB Contract, restore property and landscaping that is damaged during construction to a condition similar, equal, or better to that existing prior to the occurrence of damage by repairing, replacing in kind, rebuilding, replanting, or compensating the property owner.

**2.29.10.3 Temporary Fencing**

The Design-Builder shall be required to furnish and install temporary chain link security fencing to contain animals and people, prior to the removal of any existing ROW fencing within the Project limits.

**2.29.11 Maintenance of Aesthetic Treatment**

**2.29.11.1 General**

The Design-Builder shall monitor the appearance of the aesthetic treatments on walls or bridges for any defects, flaws, or vandalism until Physical Completion.

The Design-Builder shall note and bring to the WSDOT Engineer's attention defects, flaws, and vandalism.

Defects and flaws shall be corrected in accordance with Section 6.17(G) (Correction of Non-Conforming Phase 2 Work) of the PDB Contract.

The Design-Builder shall be responsible for cleaning up and restoring property impacted by vandalism until Culvert Bundle Physical Completion.

The use of paint or permanent marking of any type on permanent barriers, railings, and walls will not be allowed except as required by the PDB Contract.

10 **End of Section**